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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,439	03/30/2001	Peter Parani	030705-169	1303
21839	7590	01/18/2005	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			BALI, VIKKRAM	
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ALEXANDRIA, VA 22313-1404			PAPER NUMBER	

2623

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/806,439	<b>Applicant(s)</b> PARANI ET AL.	
	<b>Examiner</b> Vikkram Bali	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

In response to the amendment filled on 7/6/2004, all the amendments have been entered and the action follows:

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "said surface" in line 6. There is insufficient antecedent basis for this limitation in the claim. The surface as claimed did not differentiated if the surface is the a hemisphere shaped inner surface or some new surface.

Claim 11 claimed a limitation of "the axis of the each of said openings" but the axis as claimed in the independent claim is the axis of the symmetry of the hemisphere, the claim is not clear to what axis is called here.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al (US 4739176).

With respect to claim 9 Allen discloses a yarn inspection system in that an illumination element intensively illuminates a thread moving in a longitudinal direction (see figure 4, the thread 10 moving in a longitudinal direction and gets illuminated by the

Art Unit: 2623

lamps 52 and 53), illumination elements having an end face that defines a plane parallel to the thread (see the lamps the end face of the lamps are parallel to the thread 10), a detector disposed on an axis of symmetry, (figure 1, 2-4, and col. 3, lines 28-62 and col. 2 line 65 through col. 3 line 22) as claimed. However, he fails to disclose cavity in said end face having a hemisphere shaped inner surface and the light source in it, as claimed. Allen did not explicitly disclose this feature but, as seen from the figure 2 and 4 the light source numerical 52 and 53 of figure 4 is located in a spherical design cavity above the thread 10 and the thread numerical 10 of figure 4 is adjacent to the cavity. Therefore one ordinary skilled in the art at the time of invention can simply use the design of the Allen in order to have the thread move adjacent to the light source to inspect the thread.

With respect to claims 10, Allen further discloses the thread moves perpendicular to said axis of symmetry, (see figure 4) as claimed.

With respect to claim 11 as best understood, Allen further discloses the axis of the opening intersect the axis of the symmetry (see figure 4, the axis of the opening i.e. the cavity of the light source does intersect the axis of symmetry i.e. the longitudinal axis of the thread 10) as claimed.

With respect to claim 12 Allen fails to disclose the white coating to reflect light. But, it is well known in the art to use a white color coating on the surface in order to diffuse the light. Therefore, one ordinary skilled in the art at the time of invention can simply use the well known knowledge to get the light diffuser in order to acquire the image of the thread for the inspection of the thread.

Art Unit: 2623

With respect to claims 13, Allen further discloses the blue light is use as a light source (see col. 5, lines 12-15 for use of blue light) as claimed.

With respect to claim 14, Allen further discloses openings with light sources are symmetrically distributed around the axis of symmetry, (see the two light lamps 52 and 53 of figure 4 and col. 4, lines 2-7) as claimed.

With respect to claim 15, Allen further discloses cover disposed on the side of the thread opposite said end face (see col. 2 lines 62-65) as claimed.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 9-15 as added new claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2623

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is 703.305.4510. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703.308.6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vikkram Bali  
Primary Examiner  
Art Unit 2623



vb  
January 13, 2005